### State Alternative Fuel Vehicle Incentives: What Works

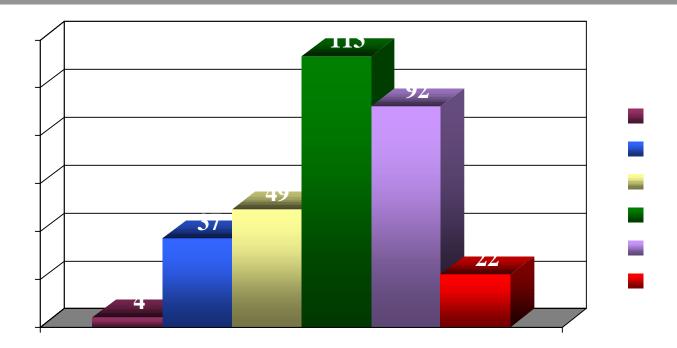


### For This Study, NCSL:

- Surveyed Fleet Managers
- Interviewed Clean Cities Coordinators
- Interviewed Utility, Government, Fleet and Manufacturer Representatives
- Surveyed Tax and Grant Incentive Managers
- Conducted Case Studies of Numerous States
- Conducted Relevant Data Analyses



### Survey Demographics





#### Incentives Must Be:

- Big Enough
- Easy to Use
- Focused on Infrastructure
- Focused on Fuel Use



### General Factors Influencing Effectiveness of Incentives

- Technology availability.
- General climate:
  - Physical
    - Montana
  - Political
    - Arizona
- Availability of fuel.
- Gasoline prices.

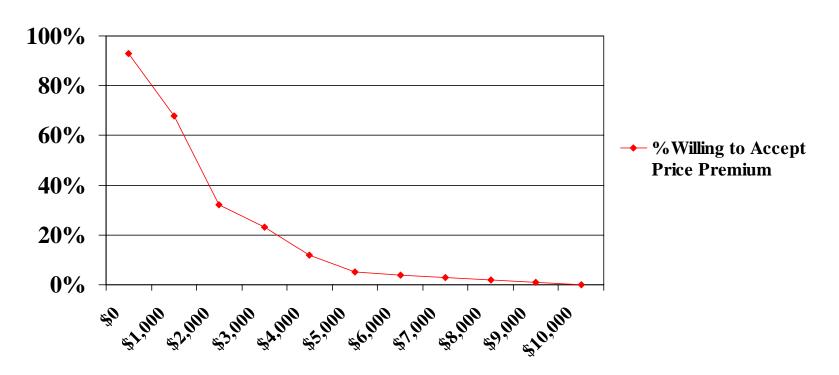


### Big Enough

- Arizona offered a large incentive for vehicles
  - Low Speed Vehicles
- Incentives should achieve "Parity or Better"



# Price Sensitivity of Retail EV Prospects (Ford Motor Company)



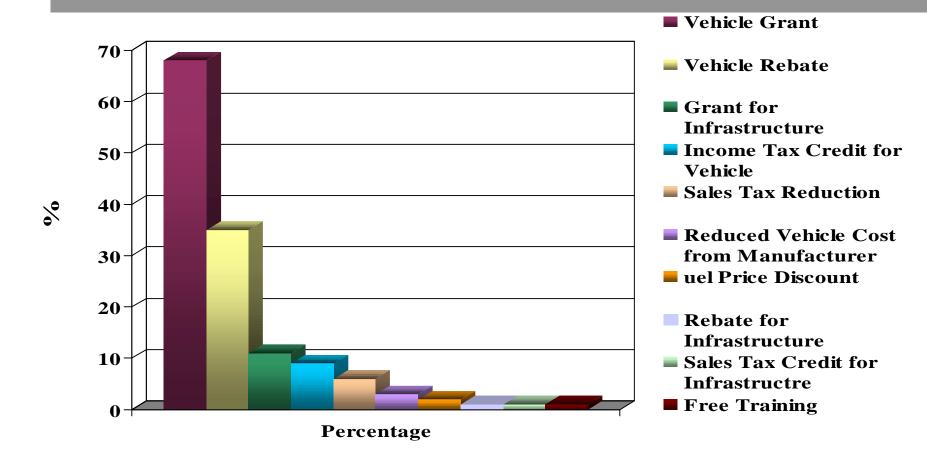


#### Easy to Use

- Grants and rebates are the easiest to use
- Receive at time of vehicle acquisition
- "Invisible" to consumer
  - CA example from South Coast Air Quality
    Management District

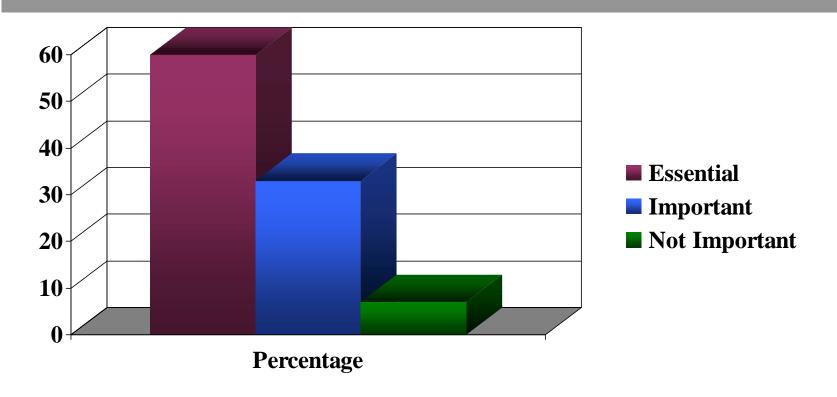


## Which Incentives Were Used Most?



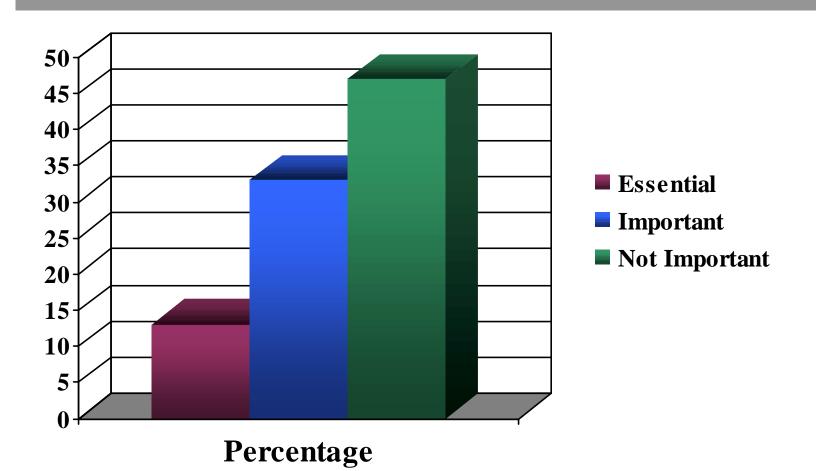


## Importance of Grants to Vehicle Purchase



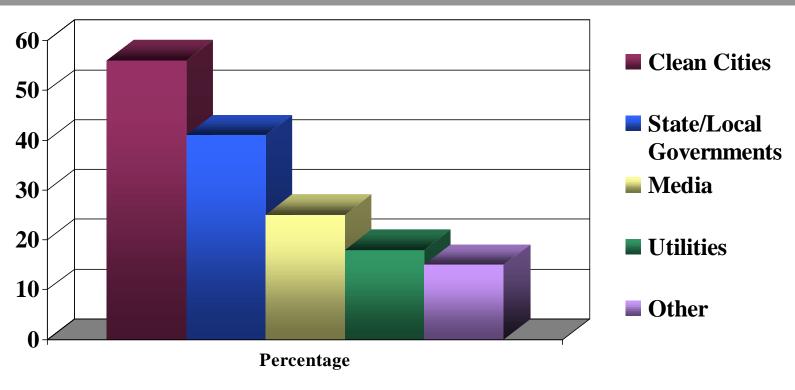


## Importance of Tax Credit to Vehicle Purchase





# How Do Consumers Find Out About Incentives?



"Other" includes National Association of Fleet Administrators, vehicle conferences, personal research, NGVC, GRI, NGRI, EEI, COG, AGA, and vehicle dealers.



#### Infrastructure

- Incentives are critical to the development of an AFV infrastructure.
- Incentive should be large enough to take into account a realistic prediction of the potential throughput.

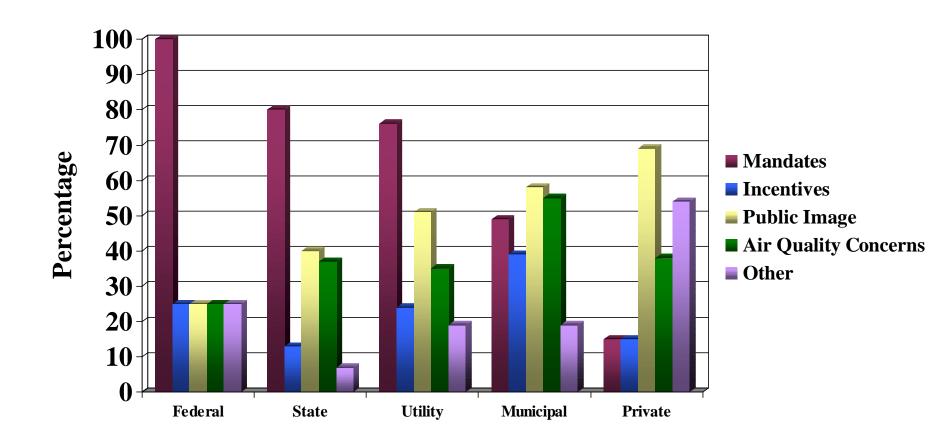


#### Fuel Use

- Flex/dual- fuel vehicles are often run on gasoline.
- Clean Fuel Fleet Program is not fuel specific and can be satisfied with conventional fuels.
- Incentives are now focused on vehicle purchase and not fuel use.



# What Motivates Fleets to Buy AFVs?





### State Leadership

- Leadership from the highest levels of government is essential to the success of an AFV program.
  - New York
  - Arizona
- Lack of success in Connecticut
  - CT did not have strong state leadership.



#### Model Programs

- Carl Moyer Program (CA)
  - Medium and Heavy Duty vehicles
  - Funds awarded based on cost efficiency standards (\$/ton of pollution offset)
  - Has more applications for funding than funds to give out.
  - Priority for alternative fuels.



#### Model Programs

- Arizona Incentive Program
  - Large incentive amounts
  - Funds for used vehicles
  - Incremental funding by emission level
  - Funds for infrastructure
  - Sales tax exemption
  - Reduced AFV License tax
  - Fuel use tax exemption
  - HOV lane use



### Involving State Legislators

- Recognize legislative schedule constraints.
- Initiate face-to-face meetings with legislators.
- Add legislators to your mailing lists.
- Directly involve legislators in Clean Cities' events and meetings.